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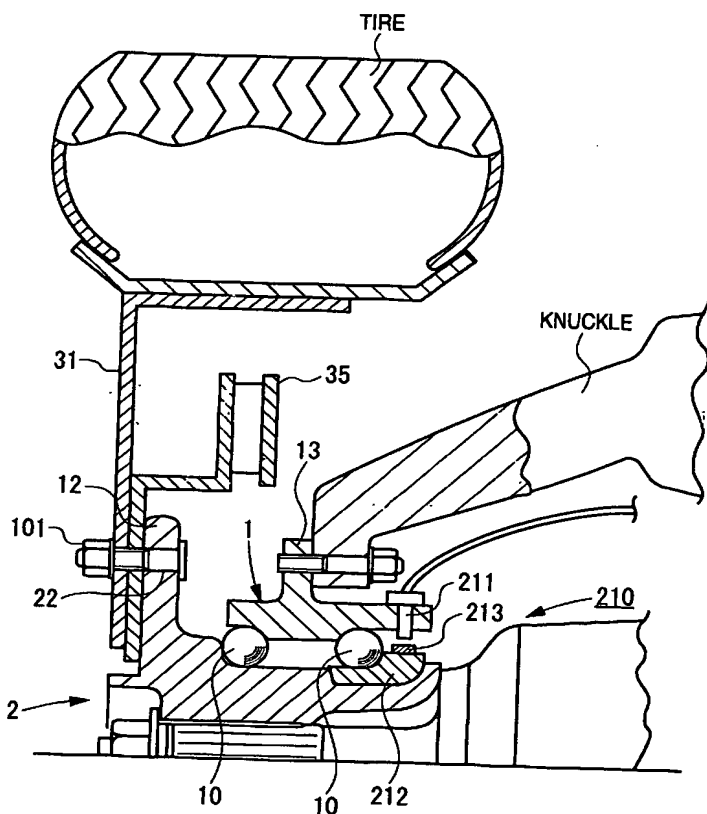
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- (21) International Application Number: PCT/JP2003/014532 (71) Applicant (for all designated States except US): NSK LTD. [JP/JP]; 6-3 Ohsaki 1-chome, Shinagawa-ku, Tokyo 141-8560 (JP).
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(54) Title: AXLE UNIT WITH SLIP SENSOR AND SLIP MEASUREMENT METHOD



(57) Abstract: An axle unit 210 including a rolling bearing unit attached to a knuckle of a wheel support member has a slip sensor (211) including acceleration sensors and a rotation sensor in one piece. The slip sensor (211) has the rotation sensor placed on the base face, and the rotation sensor is placed facing an encoder (213) attached to a rotation member (212). At the vehicle running time, the traveling acceleration in the traveling direction of the wheel and the rotation angular speed are detected and at the vehicle running time, the ground speed of each wheel, the tire radius of each wheel, and the slip ratio of each wheel are found.

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	DE 197 03 832 A (FAG AUTOMOBILTECHNIK AG) 6 August 1998 (1998-08-06) column 2, line 11 - column 3, line 59	1-17
X	US 6 002 248 A (BINDER JOSEF) 14 December 1999 (1999-12-14) column 2, line 7 - column 4, line 23	1-17
X	US 6 161 962 A (TALAFOUS JOSEPH A ET AL) 19 December 2000 (2000-12-19) column 5, line 14 - column 8, line 14; figure 3	1,3,4,6, 7,10-13, 15,16
X	EP 0 421 065 A (LEHN F HEINRICH) 10 April 1991 (1991-04-10) page 7, line 4 - page 7, line 41; figures 1-4	1-9,14, 15,17
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☒ Further documents are listed in the continuation of box C.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	<div style="text-align: center;">-----</div> PATENT ABSTRACTS OF JAPAN vol. 0120, no. 27 (M-662), 27 January 1988 (1988-01-27) & JP 62 181948 A (NISSAN MOTOR CO LTD), 10 August 1987 (1987-08-10) abstract <div style="text-align: center;">-----</div>	1-17

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information on patent family members

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